

# FACILITY COMPLIANCE INSPECTION REPORT

# Division of Waste Management Solid Waste Section

| UNIT TYPE:      |                          |                  |                        |         |   |      |  |                        |  |  |  |  |  |
|-----------------|--------------------------|------------------|------------------------|---------|---|------|--|------------------------|--|--|--|--|--|
| Lined<br>MSWLF  | LCID                     | YW               | Transfer               | Compost | X | SLAS |  | COUNTY: MITCHELL       |  |  |  |  |  |
| Closed<br>MSWLF | HHW                      | White goods      | Incin                  | T&P     |   | FIRM |  | PERMIT NO.: SWCD 61-01 |  |  |  |  |  |
| CDLF            | Tire T&P /<br>Collection | Tire<br>Monofill | Industrial<br>Landfill | DEMO    | X | SDTF |  | FILE TYPE: COMPLIANCE  |  |  |  |  |  |

#### **FACILITY NAME AND ADDRESS:**

Penland School of Crafts PO Box 37

Penland, NC 28765

# **FACILITY CONTACT NAMES AND PHONE NUMBER:**

David Sommer, P.E., LEED AP Director of Facilities and Grounds

Telephone: 828-765-0477 Fax: 828-765-2235

davidsommer@penland.org

Bronwyn May, Gardener bronwynmay@penland.org

### **FACILITY CONTACT ADDRESS:**

Same as Facility Address.

#### **PARTICIPANTS:**

Dave Sommer, Director of Facilities and Grounds Bronwyn May, Gardener Tony Gallagher, Composting and Land Application Branch Supervisor Deb Aja – Solid Waste Section

## **STATUS OF PERMIT:**

Solid Waste Composting Pilot Project, first issued January 28, 2011. An application for a permit has been submitted.

### **PURPOSE OF SITE VISIT:**

Partial inspection of facility operations.

#### STATUS OF PAST NOTED VIOLATIONS:

N/A

## **OBSERVED VIOLATIONS:**

There were no violations observed.

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.



Figure 1 - Facility Location

#### ADDITONAL COMMENTS

- 1. Pilot Project overview The project is to demonstrate the feasibility of producing compost from the Penland School of Crafts cafeteria and Coffee House waste [pre and post consumer food waste] for use in on-campus gardens. The Pilot Project was first approved for March 2009 through March 2010. The project has been granted extensions and an application is in review for a full permit.
- 2. The demonstration area was moved to a new location from the area used in 2011. The new/current area is located in an open field. There are no non-owned residential dwellings in the vicinity of the composting operations.
- 3. Facility staff changed since the 8/10/2011 inspection. The inspection was conducted to review the composting operations. A future comprehensive inspection will be conducted to include an audit of all operational and testing records.
- 4. Two composting methodologies were approved to directly receive food scraps for composting a bin system and a windrow system. Currently a bin is utilized to receive food scraps and a windrow/pile is utilized for pathogen reduction & curing. One bin of wooden pallet construction is currently in use. Food scraps are placed in the bin on a base layer of carbon material [leaves, woodchips] which also line the sides to absorb excess moisture from the food scraps and to reduce odors and flies. Food scraps and carbon material are layered in the bin in approximately equal amounts. Composting does not occur between the months of November and March.

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View of layered food waste in bin.
Digital photographs taken by Deb Aja on 10/19/2012.

View of a windrow in process.

- 5. The composting process is as follows:
  - a. The layered food waste is layered in the bin and remains static in the bin for 2 weeks to meet the temperature requirements of .1406(11).
  - b. The material in the bin is then placed into a windrow which is turned at least 5 times in a 15 day period and meets the temperature requirements of .1406(12)(A) for further pathogen reduction.
  - c. After 15 days the windrowed material is placed in a final cure pile for at least one year.
  - d. Prior to distribution/use the final product is screened.
- 6. The facility operational area was clearly marked by flags to ensure setbacks are maintained.
- 7. It is recommended that a setback distance of at least one vehicle travel lane be maintained between the woods at the edge of the field and all stockpiled woodchips, windrows, and final product to provide access for fire protection.
- 8. There was no surface water present at the operational, compost curing, and storage areas. These areas are in a moved field with drainage movement away from the facility.
- 9. There was no evidence of erosion or movement of silt or contaminants from the site.
- 10. The site is accepting wastes that it is permitted to receive.
- 11. Some odor was detected within a few feet of the bin. Several feet away and downwind of the bin there was no odor detected. There was no odor detected around the curing areas.
- 12. There were a few yellow jackets in the area during the inspection. Flies and other vectors were not observed. It is recommended that a screen be placed over the bin for additional vector control and to prevent cross contamination from material in-process to finished compost.
- 13. Excess moisture was effectively controlled by sawdust placed downgradient of the bin. There was no moisture/leachate present around the bin, windrows, or cure piles. During wet-weather conditions the bin and windrows should be observed to ensure that leachate is contained. Surface water may be directed away from composting operation areas by the use of soil berms or other measures.
- 14. Few foreign objects were observed in the windrows and cure piles. These items are manually removed and screened out of the final product before use as required.

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15. The records for testing and temperature logs were not reviewed during this inspection.

16. The access road was well maintained and the facility appeared to be well operated.

Please contact me if you have any questions or concerns regarding this inspection report.

Deborah Aja Environmental Senior Specialist Regional Representative deborah.aja@ncdenr.gov Phone: 828-296-4702 .
Asheville Regional Office 2090 US Hwy 70 Swannanoa, NC 28778

| Sent on: October 26, 2012 to    | X | Email | Hand delivery | US Mail | Certified No. [_] |
|---------------------------------|---|-------|---------------|---------|-------------------|
| Dave Sommer and Brownwn May by: |   |       |               |         |                   |
|                                 |   |       |               |         |                   |

EC: Jason Watkins, Western District Supervisor

Tony Gallagher, Composting and Land Application Branch Supervisor

Jessica Montie, Compliance Officer